EIRS
EARLY WARNING RADAR SYSTEMS
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EIRS is a new generation S-Band radar developed for long range early warning, with its AESA and digital beamforming antenna architecture. EIRS has the ability to detect and track air breathing targets, ballistic missiles, anti-radiation missiles and stealth/low RCS targets from very long ranges.

AESA and Digital Beam Forming architecture together with Multi Channel Receivers allows to produce simultaneous beams in space paving the way for multi-function and multi-mission operations. EIRS uses weather information to optimize its detection and tracking performance. EIRS is a highly mobile standalone system with its radar, command control/communication and power systems on tactical trucks without mounting/demounting operations for deployment and marchorder. EIRS can be connected to radar networks and can exchange 3D air picture among different EIRS systems and the Air Force command centers thru radios, radio links and army backbone thru AWCIES messaging. EIRS can perform data fusion and track handover amongst themselves, which is a critical feature especially for ballistic missile defense. A long range Mode S IFF interrogator is integrated with a high gain IFF antenna to cooperate with radar’s operational modes. EIRS AESA architecture and modular design approach support the concepts of high availability and low cost maintenance. EIRS, has several ECCM features such as frequency/time agility, low side lobe levels, jammer strobe and nulling, side lobe blanking, to name a few.

**Operational & Tactical Specifications**

- Effectiveness against a broad set of threats at long range
- Detection and Tracking of Targets with Very Small RCS at Long Range
- Detection and Tracking of Ballistic Missiles
- Electronic Scanning in Azimuth and Elevation
- State of the Art Solid-State Power Amplifier Technology
- Digital Beamforming
- Target Classification Capability
- Various Tactical Operation Modes
- Long Range Mod5/S IFF System (Compatible with NATO STANAG-4193)
- Local and Remote Radar Control
- Performance Evaluation Subsystem
- Integration with the National C2 Systems and NATO Air Command and Control System (ACCS)
- Integration with the Air and Missile Defense Systems
- Compliance with the Tactical Communication Networks
- Advanced Electronic Protection Measures and Cyber Security
- Counter Measures against Anti-Radiation Missiles
- Portability with 10 Ton Class Tactical Wheeled Vehicles (TWV)
- Transportable with C130/A400M
- 24/7 Operation
- 3000 Hours MTBCF
- %99.9 Availability
- 30 Minutes Deployment and March-Order Time
- Advanced Built-in Test (BIT) Capabilities
- 30 Minutes MTTR
- Endurance to Harsh Environmental Conditions (MIL-STD-810G)
- Advanced Algorithms for Windfarm Mitigation